PROSPECTUS

Exploring Opportunities for Integrated Mapping and Functional Assessment of Floodplains, Wetlands and Streams/Rivers

A Natural Floodplain Functions Alliance & Wetland Mapping Consortium Workshop

Tommy Douglas Center, Silver Spring, MD

April 10, 2018

GOAL: The goal of this first workshop is to develop a case for support for the overall project goal (the integration of wetland, floodplain and riverine geospatial mapping techniques and ecosystem function data into water resource and floodplain mapping practice and policy) and to create a roadmap for what needs to be done to successfully execute the long-term goal. The overall goal of the broader multi-year initiative is to integrate wetland and riparian geospatial mapping techniques and data into floodplain mapping programs in order to assess individual and combined functions of these natural systems.

DATE: April 10, 2018

LOCATION: Tommy Douglas Conference Center, Silver Spring, MD

HOST: Association of State Wetland Managers

 COOPERATING PARTIES: The Natural Floodplain Functions Alliance and the Wetland Mapping Consortium

WORKSHOP COORDINATORS: Jeanne Christie, ASWM; Marla Stelk, ASWM; David Fowler, ASFPM; Andy Robertson, Saint Mary's University of Minnesota; Dave Carlton, DK Carlton, Inc.; David Knipe, Indiana Dept. of Natural Resources; Eileen Shader, American Rivers; George Xian, USGS; Mike Klein, Vermont Dept. of Environmental Conservation; Maria Honeycutt, NOAA; Megan Lang, FWS; Mitch Bergeson, FWS; Steve Kloiber, Minnesota Dept. of Natural Resources.

TARGET AUDIENCE: Data generators, data users, regulators, state and federal program managers, policy makers

BACKGROUND FOR WORKSHOP:

The National Oceanic and Atmospheric Administration (NOAA) has found that there has been a significant increase in the intensity of precipitation events in most parts of the United States over the last few decades due to climate change. Flood losses are continuing to increase as a result and greater efforts must be employed to adapt to the impacts of climate change, especially flooding. Record flooding in 2016 alone resulted in $3.5 billion in National Flood Insurance Program (NFIP) claims. The NFIP has now reached its $30.4 billion borrowing limit. Even if the recent measure by the U.S. Senate to forgive $16 billion of the NFIP debt receives President Trump's approval, it does not include any broader changes to the program to make it more sustainable over time.

This means there is a critical need to make our communities more resilient before the next major flood event to reduce future damages. Increasingly, efforts to protect, restore, enhance and create natural floodplains and wetlands are being employed to replace and enhance lost or degraded ecosystem functions that provide critical

benefits for communities such as water quality, wildlife habitat, and flood risk reduction. The wetland mapping community (and more recently the riparian mapping community) has a long history of developing and applying data on wetland functions to inform scientific research, policy, land-use decisions, and wildlife and water resource management efforts. However, the floodplain mapping community has primarily focused its efforts on providing data on floodplain extent to inform the NFIP regarding the boundaries of the 100 year floodplain. Floodplain management efforts would be dramatically improved if they could be informed by geospatial data that describes floodplain functions (including wetlands, streams and rivers) as a component of a larger watershed to support more strategic natural resource and land use decisions as well as reduce risk.

PROPOSED OUTCOMES:

<u>**Short term**</u>: A one-day workshop on Tuesday, April 10, 2018 to be held at the Tommy Douglas Conference Center in Silver Spring, Maryland - one day before the ASWM annual meeting commences at the same location. This will be an invitation only event, restricted to approximately 50 participants. The audience for this workshop will primarily include members of the wetland, stream and floodplain mapping community, including state and federal agency staff and private contractors. Proceedings, including an action agenda based on discussions and recommendations from the workshop, will be recorded in a white paper to inform overall project next steps and to be used to build support for the broader initiative, including funding for workshops 2 and 3. The white paper will be used to develop presentations and will be distributed among the wetland, riverine, riparian, floodplain and coastal mapping communities.

- White Paper – proceedings from 1st workshop – to include findings from the workshop and next steps
- Roadmap for 2 future workshops (including plans for activities in between such as webinars, one-on-one meetings, etc. necessary to continue making progress in between workshops)

<u>**Long term**</u>: Additional workshops will be held in 2019 and 2020 to continue this initiative. After the 2018 workshop, interim work will be conducted to set the stage for the 2019 workshop, such as: 1) one-on-one meetings with agencies such as FEMA, DOI, EPA, FWS, USGS, state agencies, insurance companies and others to demonstrate the benefits of mapping floodplain functions, 2) regular committee conference calls, and 3) webinars on topics such as case studies and examples of integrated floodplain, riverine and/or wetland mapping projects, and geospatial methods to infer floodplain function, etc. conducted through NFFA. The 2019 workshop (to be potentially held at ASFPM's Annual Conference) will focus on the floodplain technical issues, i.e., what kinds of data are most useful, how to integrate functional data into floodplain mapping programs, and where gaps in data and capacity may exist that need to be addressed. After the 2019 workshop, similar next steps will be taken to prepare for the next workshop as have been proposed for after the 2018 workshop (e.g., meetings, reports, webinars, etc.). The 2020 workshop (to be potentially held at the Society of Wetland Scientists Annual Meeting or another appropriate location) will focus on identifying the important program and policy changes that need to be made to carry out and implement this advanced floodplain mapping approach. There will also be another series of actions identified in the 2020 workshop that will be carried out to complete the project.